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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,172	07/21/2004	Shin'Ichi Honma	DE20021	5519
24737	7590	10/06/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			ALEMU, EPHREM	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/502,172

Applicant(s)

HONMA ET AL.

Examiner

Ephrem Alemu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-21-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 3, the limitation “wherein the run-up phase (B1) comprises at least the interval from 0.5 s after ignition of the lamp (10) to 4 s after ignition of the lamp (10)” is an improper extension of the run-up phase being at least the interval from 1 s after ignition of the lamp (10) to 3 s after ignition of the lamp (10).
2. Claims 2 and 11 are objected to because of the following informalities: In claims 2 and 11, lines 4 and 11, respectively, change the misspelled word “valves” to --values--. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex*

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*parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitation 75%, and the claim also recites 60% which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Huber et al. (US 5,74,132).

Re claims 1, 3 and 9, Huber discloses a lighting system comprising a gas discharge lamp (EL) and a control device (Fig. 2) for controlling the gas discharge lamp (140) with

a current supply device (i.e., switches S1-S4) for supplying the lamp with an alternating current of given amplitude (Fig. 2), and

a programming unit (i.e., control circuit C2) for providing amplitude values to the current supply device (i.e., switches S1-S4) during a run-up phase (Figs. 1, 2, Col. 3, line 50- Col. 4, line 13).

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Huber further discloses the discharge lamps are supplied, in accordance with the prior art, with the run-up phase comprises at least the interval from 0.5 s after ignition of the lamp (i.e., high pressure discharge lamp EL) to 4 s after ignition of the lamp (i.e., high pressure discharge lamp EL), and the programming unit (i.e., control circuit C2) effectuates, in accordance with the prior art, a substantially rising gradient in time of the current (IL) during the run-up phase (T2') (Fig. 1; Col. 2, line 54- Col. 3, line 12).

Re claim 4, Huber shows in Fig. 1 the current (IL) rises by at least 30% in the run-up phase (T2') with respect to the value at the start of the phase.

Re claims 5 and 6, Huber shows in Fig. 1 the time gradient of the current (IL) in the run-up phase (T2') rises monotonically averaged over time and the current (IL) is an alternating current with a substantially square-wave characteristic in time and a frequency of at least 200 Hz.

Re claim 7, Huber shows the current (IL) drops to a stationary value in a transition phase (T3') following the run-up phase (T2') (Col. 3, lines 3-16).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber et al. (US 5,742,132) in view of Ishizuka (US 6,163,115).

Re claims 2 and 11, Huber discloses a lighting system comprising a gas discharge lamp (EL) and a control device (Fig. 2) for controlling the gas discharge lamp (140) with

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a current supply device (i.e., switches S1-S4) for supplying the lamp with an alternating current of given amplitude (Fig. 2), and

a programming unit (i.e., control circuit C2) for providing amplitude values to the current supply device (i.e., switches S1-S4) during a run-up phase (Figs. 1, 2, Col. 3, line 50- Col. 4, line 13).

Huber further discloses the discharge lamps are supplied, in accordance with the prior art, with the run-up phase comprises at least the interval from 0.5 s after ignition of the lamp (i.e., high pressure discharge lamp EL) to 4 s after ignition of the lamp (i.e., high pressure discharge lamp EL), and the programming unit (i.e., control circuit C2) effectuates, in accordance with the prior art, a substantially rising gradient in time of the current (IL) during the run-up phase (T2') (Fig. 1; Col. 2, line 54- Col. 3, line 12).

Huber does not disclose the time gradient being chosen such that the luminous flux generated by the lamp (i.e., high pressure discharge lamp EL) achieves at least at two given moments assigned minimum values.

In the same field of endeavor, Ishizuka teaches of providing a high discharge lamp with an optimal power during the period of starting the discharge lamp in response to the discharge lamp temperature (i.e., cold or hot) to allow the luminous flux rise certainly for the purpose of extending the life of the lamp (abstract; Figs. 1, 3; Col. 5, lines 29-56; Col. 11, lines 5-63; Col. 13, line 35- Col. 14, line 44).

It would have been within a skill of an artisan at the time the invention was made to modify the control circuit of Huber for providing the high discharge lamp with an optimal power during the period of starting the discharge lamp in response to the discharge lamp temperature

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(i.e., cold or hot) to allow the luminous flux rise certainly for the purpose of extending the life of the lamp as taught by Ishizuka.

Re claim 8, given Huber modified by Ishizuka high pressure discharge lamp lighting apparatus system the current (IL) at the start of the run-up phase (T2') amounts to be less than 60% of the maximum value that the current assumes in the interval after 1 s after ignition would have been obvious since an optimal power is supplied during the period of starting the high pressure discharge lamp.

Re claim 10, Ishizuka further teaches of using high-pressure discharge lamp which does not contain mercury for the purpose of preventing environmental pollution (Col. 12, lines 38-50).

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prasad et al. (US 6,552,498) ; Shone et al. (US 6,160,362); and Paul et al. (US 5,677,602); also teach similar inventive subject matter.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA  
9-29-05



WILSON LEE  
PRIMARY EXAMINER